

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A color display device for displaying a color image, comprising:

a display panel provided with a plurality of picture elements, at least two selectable light sources having different predetermined radiance spectra, each of said spectra having a plurality of peaks at different desired wavelengths,

a color selection means which in combination with the selectable light sources is able to produce primary colors on the display panel,

control means arranged to select alternately one of the selectable light sources during a first and second period respectively and to provide a portion of the picture elements with image information corresponding to the primary color obtainable with the selected light source,

wherein the color selection means comprises a filter arrangement comprising a number of lines, each line comprising consecutive triplets of a blue-cyan filter, a white filter and a green-red filter, wherein the blue-cyan filter has a pass band for the blue-cyan portion of the spectrum of the radiation, the white filter has a pass band for the visible portion of the spectrum of the radiation and the green-red filter has a pass band for the green-red portion of the spectrum of the radiation.

2.(Original) A color display device as claimed in claim 1 wherein the color selection means comprises at least two color filters having predetermined transmittance spectra which in combination with each of the radiance spectra of the selectable light sources yields a first group of primary colors obtainable by selecting the first light source and a second group of primary colors obtainable by selecting the second light source.

3.(Original) A color display device as claim in claim 2 wherein each color filter is associated with a portion of the picture elements and the control means being arranged, during a

first period, to select the first light source and to provide the respective portions of the picture elements associated with the respective color filters with image information corresponding to respective primary colors of the first group and

during a second period, to select the second light source and to provide the respective portions of pixel elements associated with the respective colorfilters with image information corresponding to respective primary colors of the second group.

4. (Currently Amended) A color display device as claim in claim 2 wherein ~~the color selection means comprises two color filters and~~ the first group of primary colors contains red and green and the second group of primary colors contains green and blue.

5. (Currently Amended) A color display device as claimed in claim 2 wherein ~~the color selection means comprises two color filters and~~ the first group of primary colors contains blue and yellow and the second group of primary colors contains cyan and red.

6. (Original) A color display device as claimed in claim 1 wherein the first light source is able to emit radiation having a spectral distribution having peaks centered around the red and cyan wavelength ranges respectively and the second light source is able to emit radiation having a spectral distribution having peaks centered around the green-red and blue wavelength.

Claim 7 (Canceled)

8. (Currently Amended) A color display device as claimed in ~~claim 7~~ claim 1 wherein the positions of the blue-cyan filter and the green-red filter respectively in the triplets of a first line are interchanged with respect to the positions of the blue-cyan filter and the green-red filter respectively in the triplets of a second line consecutive to the first line.

9. (Currently Amended) A color display device as claimed in ~~claim 7~~ claim 1 wherein a line comprises consecutive triplets wherein the green-red filter and blue-cyan filter meet each other and together enclose the white filter.

10. (Currently Amended) A color display device as claimed in ~~claim 7~~ claim 1 wherein the pitch P represents the distance between the centers of two consecutive filters in the triplet, and the triplets of a first line are displaced with a distance of 1.5 times the pitch P with respect to triplets of a second line, consecutive to the first line.

11. (Original) A color display device as claimed in claim 2 wherein the color selection means comprises three color filters and the first group of primary colors contains red, green and blue and the second group of primary colors contains cyan, deep blue and yellow.

12. (Currently Amended) A color display device ~~as claimed in claim 3~~ for displaying a color image, comprising:

a display panel provided with a plurality of picture elements,
at least two selectable lightsources having different
predetermined radiance spectra, each of said spectra having a
plurality of peaks at different desired wavelengths,

a color selection means which in combination with the selectable light sources is able to produce primary colors on the display panel,

control means arranged to select alternately one of the selectable lightsources during a first and second period respectively and to provide a portion of the picture elements with image information corresponding to the primary color obtainable with the selected light source,

wherein the color selection means comprises at least two color filters having predetermined transmittance spectra which in combination with each of the radiance spectra of the selectable light sources yields a first group of primary colors obtainable by selecting the first light source and a second group of primary colors obtainable by selecting the second light source,

wherein each color filter is associated with a portion of the picture elements and the control means being arranged, during a first period, to select the first light source and to provide the respective portions of the picture elements associated with the respective color filters with image information corresponding to respective primary colors of the first group and

during a second period, to select the second light source and to provide the respective portions of pixel elements associated with the respective colorfilters with image information corresponding to respective primary colors of the second group, and

wherein the primary colors of the first group combined together form substantially white and the primary colors of the second group combined together form substantially white and the control means are arranged to adjust a modulation level of the display panel for the primary colors corresponding to the two subsequent periods that the perceived difference in luminance and/or chrominance in the two subsequent periods is minimized.

13.(Original) A color display device as claimed in claim 12 wherein the control means are arranged to adjust a modulation level of the display panel so as to minimize the perceived difference in luminance and/or chrominance of the obtained primary colors corresponding to the two subsequent periods is minimized.

14.(Original) A color display device as claimed in claim 12 wherein the control means are arranged to adjust the brightness

levels of the sequentially selected light source so as to minimize a measured difference in luminance and/or chrominance of illumination of the display panel corresponding to the two subsequent periods.

15.(Original) A color display device as claimed in claim 1 wherein the color selection means comprises a lightguide for guiding the light from one of the light source to the portion of the display elements corresponding to one of the primary colors.

16.(Original) A color display device as claimed in claim 1 wherein the light sources comprise fluorescent lamps or light emitting diodes.

17.(Currently Amended) A method of operating a color display device for displaying a color image, comprising the steps of:
generating light having different predetermined radiance spectra in subsequent first and second periods, each of said spectra having a plurality of peaks at different desired wavelengths,

filtering the generated light from the selected light sources for generating primary colors on the display panel during the subsequent periods, and

providing image information corresponding to the primary colors related to the subsequent periods to portions of the color display panel,

wherein the filtering step is performed by a filter arrangement comprising a number of lines, each line comprising consecutive triplets of a blue-cyan filter, a white filter and a green-red filter, wherein the blue-cyan filter has a pass band for the blue-cyan portion of the spectrum of the radiation, the white filter has a pass band for the visible portion of the spectrum of the radiation and the green-red filter has a pass band for the green-red portion of the spectrum of the radiation.